AMENDMENTS

In the Claims:

Please amend the claims as follows.

1. (Original) A combination product comprising at least one antisense oligonucleotide of the gene encoding MBD2 demethylase and at least one agent used in antitumor chemotherapy, for simultaneous, separate or prolonged use intended for the treatment of proliferative and inflammatory diseases.

2. (Previously presented) The combination product of claim 1, wherein the antisense of the gene encoding MBD2 demethylase comprises at least:

a) 15 consecutive nucleotides of the sequence SEQ ID No. I or of the sequence complementary thereto, or of the sequence SEQ ID No. 2, or

b) a sequence capable of hybridizing selectively with one of the sequences defined in a).

3. (Previously presented) The combination product of one of claim 1 or 2, wherein the agent used in antitumor chemotherapy is a compound belonging to the bleomycin family.

4. (Withdrawn) The combination product of one of claim 1 or 2, wherein the agent used in antitumor chemotherapy is an antineoplastic agent[[s]] capable of methylating DNA.

5. (Withdrawn) The combination product of one of claim 1 or 2, wherein the agent used in antitumor chemotherapy is a chloroethylating agent.

6. (Withdrawn) The combination product of one of claim 1 or 2, wherein the agent used in antitumor chemotherapy is selected from the group consisting of:

- a cytolytic,
- a pro-apoptotic agent, and

- an antimitotic.

7. (Previously presented) The combination product of claim 1, wherein the antisense oligonucleotide of the gene encoding MBD2 demethylase is in a vector comprising a promoter which allows its effective expression in a eukaryotic cell.

8. (Previously presented) The combination product of claim 7, which further comprises a poly A transcription termination sequence.

9. (Previously presented) The combination product of claim 7, wherein the vector is a plasmid.

10. (Previously presented) The combination product of claim 1, wherein the antisense oligonucleotide is a double-stranded DNA.

11. (Previously presented) The combination product of claim 10, which further comprises one or more elements which promote the transfer of the antisense oligonucleotide into the target cells.

12. (Previously presented) The combination product of claim 11, wherein the antisense oligonucleotide is suitable for administration in vivo by electrotransfer.

13. (Previously presented) The combination product of claim 12, further comprising one or more pharmaceutically acceptable vehicle(s).

14. (Previously presented) The combination product of claim 13, for simultaneous, separate or prolonged use in the treatment of cancer.

15. (Previously presented) The combination product of claim 14, which is suitable for administration by intratumor injection.

16. (Previously presented) The combination product of claim 3, wherein said compound is bleomycin.

17. (Withdrawn) The combination product claim 4, wherein said agent is selected from the group consisting of streptozotocin, procarbazine, dacarbazine and temozolomide.

18. (Withdrawn) The combination product of claim 5, wherein said agent is selected from the group consisting of chloroethylating agent 1-(2-chloroethyl)-3-(2-hydroxyethyl)-1-nitrosourea,
1-(chloroethyl)-3-(2-hydroxyethl)-1-nitrosourea,
1,3-bis(2-chloroethyl)-1-nitrosourea,
1-(2-chloroethyl)-3-(4-amino-2-methyl-5-pyrimidinyl)methyl1-nitrosourea,
1-(2-chloroethyl)-3-cyclohexyl-l-nitrosourea,
1-(2-chloroethyl)-3-(4-methylcyclohexyl)-1-nitrosourea,
1-[N-(2-chloroethyl)-N-nitrosoureido]ethylphosphonic acid diethyl ester, and
2-chloroethylmethylsulfonylmethanesulfonate.

19. (Withdrawn) The combination product of claim 6, wherein said cytolytic agent is selected from the group consisting of dacarbazine, hydroxycarbamide, asparaginase, mitoguazone and plicamycin.

20. (Withdrawn) The combination product of claim 6, wherein said pro-apoptotic agent is selected from the group consisting of glucocorticoid derivatives, topoisomerase 2 inhibitors and topoisomerase 1 inhibitors.

21. (Withdrawn) The combination product of claim 20, wherein said topoisomerase 2 inhibitor is an anthracycline epipodophyllotoxin.

22. (Withdrawn) The combination product of claim 21, wherein said antracycline epipodophyllotoxin is etoposide.

23. (Withdrawn) The combination product of claim 20, wherein said topoisomerase 1 inhibitor is a camptothecin derivative.

24. (Withdrawn) The combination product of claim 6, wherein said antimetabolite agent is selected from antifolates, the group consisting of antipurines, and antipyrimidines.

25. (Withdrawn) The combination product of claim 24, wherein said antifolate is methotrexate.

26. (Withdrawn) The combination product of claim 24, wherein said antipurine is 6-mercaptopurine.

27. (Withdrawn) The combination product of claim 24, wherein said antipyrimidine is 5-fluorouracil.

28. (Withdrawn) The combination product of claim 6, wherein said antimitotic agent is selected from the group consisting of vincaalkaloids and taxoids.

29. (Previously presented) The combination product of claim 12, wherein the electro transfer is by weak electric fields of between 1 and 600 V/cm.